

bedarf noch weiterer Beobachtungen (vergl. die Anmerkungen zu *J. supinus* und zu *J. acuminatus*)."¹ More recent botanists, beginning with Waghorne, have, however, collected the species and now all doubt of its American occurrence is removed; it is abundant about or in sandy or peaty pools and depressions in southeastern Newfoundland, on St. Pierre et Miquelon and on Sable Island, nearly one hundred miles off Nova Scotia.

The object of this note is to stimulate search for *Juncus bulbosus* in Massachusetts, not as a mere random proposition, but because, in the herbarium of the British Museum there is a perfectly typical specimen of it bearing the original and very characteristic label of Thomas Nuttall: "*Juncus uliginosus*. Mass." Here, indeed is a challenge. Is *J. bulbosus* another of the highly localized relics of an early migration along the continental shelf between southern New England and Newfoundland? The number of such cases known is considerable. The number of western Eurasian types also indigenous in Newfoundland is augmented by every serious exploration. Several of the latter species are also in Nova Scotia or in eastern Massachusetts, while a few are native in Nova Scotia or in eastern Massachusetts (or adjacent areas) but not yet known from Newfoundland: such species as *Potamogeton polygonifolius* Pourret (Nfld., Miq., Sable I.); *Puccinellia maritima* (Huds.) Parl. (N. S., s. Me. to R. I.); *Sieglingia decumbens* (L.) Bernh. (Nfld., N. S.); *Agropyron pungens* (Pers.) R. & S. (N. S., s. Me. to Cape Cod); *Carex Hostiana* DC. (var. *laurentiana* Fern. & Wieg.) (Nfld., Miq., Antic. I., Tewksbury, Mass.); *Juncus effusus*, var. *conglomeratus* (L.) Engelm. (Nfld., Miq., N. S., se. Conn.); *Polygonum Raii* Bab. (Nfld., Miq., N. S., etc.); *Ranunculus Flammula* L. (Nfld., Miq., N. S.) and *Potentilla procumbens* Sibth. (Nfld., N. S.).

Although Nuttall, a century ago, may have found *Juncus bulbosus* on one of the outer sands which have subsequently disappeared, it is worth while to keep it in mind. There are plenty of sandy and peaty depressions in eastern Massachusetts where it may still linger.—M. L. FERNALD.

AN ESTUARINE VARIETY OF *MIMULUS RINGENS*.—In September, 1916, Mr. Bayard Long and I collected extensively on the tidal mud-flats of the Penobscot and Kennebec systems in Maine. On the tidal

¹ Buchenau in Engl. Bot. Jahrb. xii. 293 (1890).

mud at Bangor we got a very characteristic extreme of *Mimulus ringens* L., with greatly shortened internodes, unusually short leaves, and peduncles and calices much shorter than in the plant of ordinary inland shores and meadows. In September, 1931, I saw the same extreme development on several tidal shores of the St. Lawrence from above the city of Quebec to several miles below. The material, closely matching that from the Penobscot estuary, stands so clearly apart from typical *M. ringens* that I am separating it as

MIMULUS RINGENS L., var. **colpophilus**, var. nov., simplex vel subsimplex, internodiis 1.5–2.5 cm. longis; foliis oblongis subacutis vel obtusis plerumque 2.5–5 cm. longis; pedunculis 1–1.7 cm. longis; calycibus maturis 8–10 mm. longis.—QUEBEC: tidal mud of the St. Lawrence below the mouth of Chaudière River, September 15, 1931, *Fernald*, no. 2543 (TYPE in Gray Herb.); and noted in other parts of the estuary northeastward to Co. Bellechasse. MAINE: tidal mud-flats of the Penobscot, Bangor, September 7, 1916, *Fernald & Long*, no. 14,501.

In typical *Mimulus ringens* L. and in the southern var. *minthodes* (Greene) Grant the internodes are usually elongate, the middle and upper ones mostly 3–7 cm. long, the principal leaves (except in obviously dwarfed individuals) 5–13 cm. long, the lowest peduncles 2–4.5 cm. long and the mature calyx 1.3–2 cm. long. Var. *colpophilus* is not to be confused with var. *congestus* Farw. Rep. Mich. Acad. Sci. xix. 249 (1917). The type-number of the latter, represented in the Gray Herbarium, has the long and remote acuminate leaves and the large calyx of typical *M. ringens*, with peduncles shorter than the average.—M. L. FERNALD, Gray Herbarium.

VICTORIN'S LES SPADICIFLORES DU QUÉBEC.¹—Continuing the interesting and valuable series of monographs which will one day form a complete flora of Quebec, Frère Marie-Victorin has recently published this new contribution on *Araceae* and *Lemnaceae*, grouped together as *Spadiciflores*. As in the previous monographs, the descriptions bring together not only the morphological details necessary for classification, but notes on the derivation of Latin and vernacular names, palaeobotany, distribution, bio-ecology, pathology, folklore, and other interesting facts about the plants considered. Especially interesting is the carefully worked out differentiation between *Arisaema triphyllum* and *A. Stewardsonii*. Carefully drawn plates by Frère Alexandre help much to make this clear. In fact, the illustrations are uniformly good, and the distribution maps as well. Six half-tone plates of different phases in the life of *Symplocarpus*,

¹ Les Spadiciflores du Quebec. Par Frère Marie-Victorin. 60 pages, 27 figures. 1931. \$.75. (Contrib. Lab. Bot. Univ. Montréal, No. 19.)